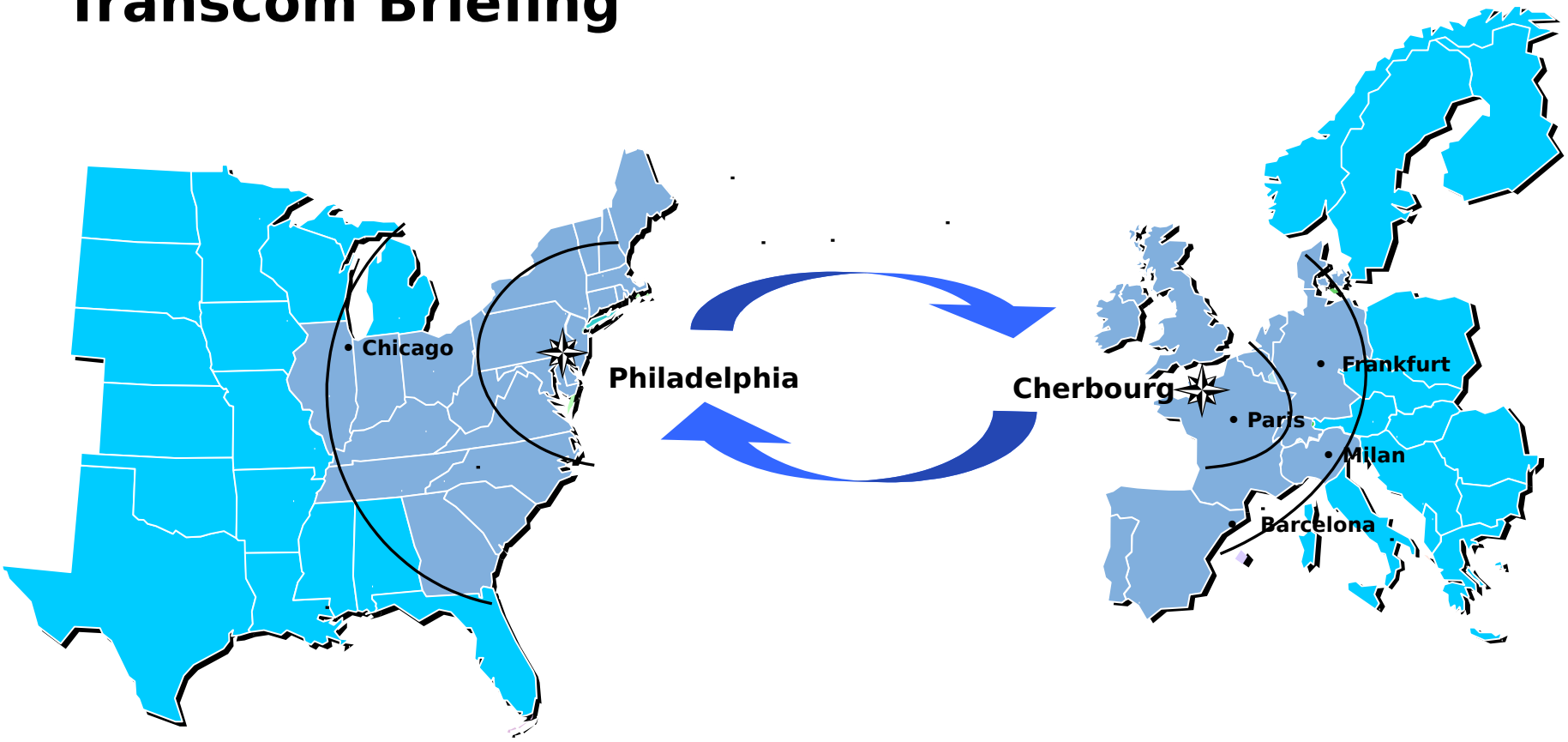
FastShip, Inc.

Transcom Briefing



February 6, 2002

Agenda – February 6, 2002

- **FastShip Business Overview**
- **Video – FastShip with National Defense Features**
- **FastShip Military Sealift Capabilities with NDF**

Mission statement

The mission of FastShip, Inc. is to build low cost, intercontinental, time definite express freight transportation networks thereby creating a third mode for freight:

- *FastShip will revolutionize supply chain management for high value, time sensitive goods by integrating patented ship and terminal technologies with inland rail and truck networks through advanced information and communication systems.*
- *Speed, reliability, frequency of service, and relative cost represent the value equation.*

FastShip provides a service comparable to standard air freight …. at half the cost

Achieved by a network consisting of five key elements:

1. **Patented ships** capable of carrying 10,000 tonnes of payload across the North Atlantic in 3.5 days at a sustained speed of 38 knots -- halving the time of a standard ocean crossing and arriving on time every time
2. **Patented cargo handling systems** and terminal technologies cutting load, unload, and terminal dwell times by a factor of four or more
3. **Dedicated terminals** in Philadelphia and Cherbourg custom designed around the FastShip system
4. World class **inland transportation partnerships** to manage seamless door-to-door freight movement
5. **State of the art, internet-based information technology** providing access for the customer and complete in-transit visibility

Result

Time definite 7 day service door-to-door, 3 times per week

Business Confidential

This company is ready to go

Current Status

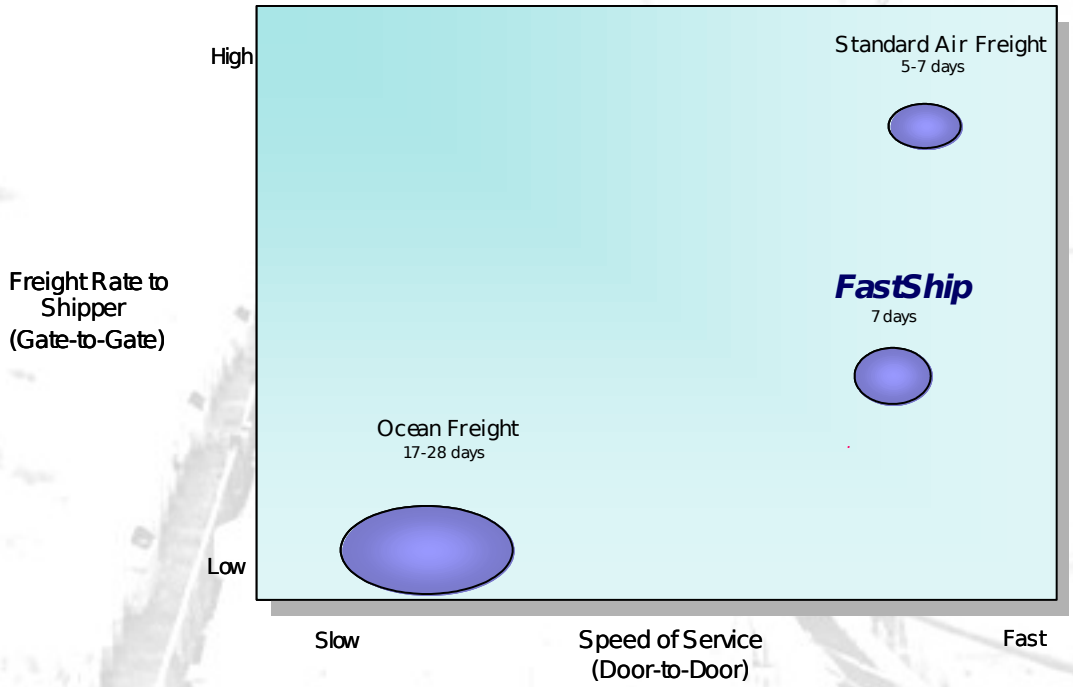
- FSI has invested $32 million to create $2 billion project
- Ship technology developed, exhaustively tested, and approved by classification society Det Norske Veritas (DNV)
- Strategic partnerships arranged for technology, operations, marketing, project management and finance
- Supply contracts in place for engines, waterjets, gears, ride control system, etc.
- MARAD due diligence well advanced for Title XI funding
- Commitments in place for $431 million of financing to complement Marad Title XI funding

FastShip's business plan fulfills the key requirements for investors

- FastShip's market opportunity is huge
- FastShip's market opportunity is highly profitable
- FastShip can sustain its competitive advantage and maintain high levels of profitability well into the future
- FastShip has an execution strategy that ensures rapid market penetration and mitigates risk
- FastShip has substantial opportunities to extend beyond the base business model presented in the business plan

FastShip will exploit the enormous rate and service gap between the only modes available to international freight shippers…air and ocean

TRANS-ATLANTIC FREIGHT TRANSPORTATION OPTIONS
SERVICE VS. RATES



Business Confidential

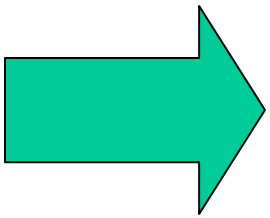
FastShip's patents ensure control of capacity in this new middle market

Ship patents:

- Broad-based patent: covers semiplaning monohull form propelled with waterjets over 2000 tons displacement; incorporates loading system
- Patented in most major shipbuilding countries
- U.S. patent extended to 2015

Container Train patents:

- Held by TTS Technology ASA, a major investor in FSI
- FSI has exclusive use through 2015



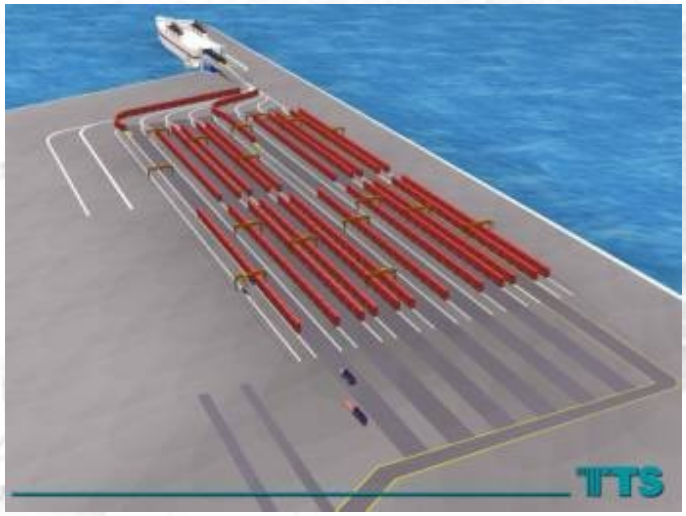
- Ship patents are very difficult to circumvent
- Interest of U.S. and French governments enhances ability to defend patents
- Competitive incursion into the heart of the middle market would have to be based on a radically new technology
- Radically new technologies have long lead times and are visible during development and classification
- New technologies face substantial barriers of capital and time; FastShip's experience is a case in point with $30 mm invested in technical and commercial development since 1994

Ship technology brings speed, reliability, asset utilization, and patents

- Semi-planing monohull powered by Rolls-Royce Trent aeroderivative engines
- Unique performance characteristics in open ocean conditions:
  - Speed: capable of halving North Atlantic ocean crossing times (i.e. 91 hours)
  - Weather-resistance: maintain speed even in adverse weather; therefore arrive consistently on time and enable synchronization of inland transportation to the ship schedule
- Favorable economic characteristics:
  - Capacity: 10,000 payload tonnes
  - High asset utilization: 39 round trips per year vs. 13 for conventional ships
  - Low cost of operation and ownership compared to freighter aircraft
- Patented by FSI

Business Confidential

Loading system is integrated into ships and terminals and brings speed, reliability, productivity, and patents



- Favorable economic characteristics:
  - High level of automation reduces terminal handling costs
- Uniquely harmonious with ship design; ability to load/discharge multiple units simultaneously via container train system cannot be used in a conventional vessel having a central engine room block
- Unique performance characteristics:
  - Speed in turning around the ship: 6 hours vs 24 hours which is equivalent to additional 10 knots of speed on water
  - Speed in clearing the terminal: allows open access to all containers, enabling an operation that can clear the terminal in 12-16 hours
- Load plan driven by logistics considerations rather than vessel stability
- Patented by TTS – a FastShip strategic partner and shareholder; FastShip has exclusive rights

Business Confidential

The logistics network includes flexible buffers to ensure reliability of the 7-day door-to-door service promise

Closed network solution:

- Ships call on **dedicated** terminals in Philadelphia and Cherbourg, specifically designed around the container train system to meet the needs of the FastShip service – no congestion
- Inland transportation networks synchronized with ship schedules, operated by strategic partner **Schneider Logistics** in North America and Europe
- Future-focused IT to integrate operations in order to provide to the shipper a seamless door-to-door product, complete in-transit visibility of freight, ease of access

	Ground transport in the US	Philadelphia Terminal	Shipping	Cherbourg Terminal	Ground transport in Europe	**Total**
Time (hours)	24	6	100	6	32	~168
Planned buffer (hours)	variable by location	←	10	→	variable by location	
Achievable Reliability Percent of time	~99	~99	98	~99	95-98	~90-95

The FedEx model extended to freight

Business Confidential

Strategic partnerships

TECHNOLOGY	
Shipyard	***Kvaerner Philadelphia Shipyard Inc.*** under MOU
Engines & Waterjets	***Rolls-Royce Plc.*** under contract.
Ship Construction Mgmt.	**John J. McMullen Associates, Inc. –** naval architect and marine engineer. **SeaTechnology (USA)** – owner's representatives.
Gears	**Philadelphia Gear Corporation** under contract.
Loading System	***TTS Technology ASA*** under contract.
Terminal-Philadelphia	• **Aegis Property Management** provides project management. • **Urban Engineers Inc**. is responsible for engineering and technical design of the terminal. • **Keating Building Corp**. is responsible for the General Construction of the terminal.

FINANCE	
Port of Cherbourg	• **Chambre de Commerce et d'Industrie de Cherbourg-Cotentin** provides terminal site and infrastructure, and seed financing • **SNCF** is an investor in the terminal; providing dedicated rail performance assurances
Port of Philadelphia	**Delaware River Port Authority** agreed to underwrite $75 million to finance the Philadelphia terminal and is an equity investor in FastShip. Agreement of Sale signed for terminal site in Port Richmond.
U.S. Government	Application well advanced with **MARAD** for $1.6 billion loan guarantee.
French Government	**Direction du Transport Maritime** responsible for coordination of public investments in port and regional infrastructure; $100 million committed.
Investment Bankers	***J.P. Morgan*** is the lead bank for financing process and will be equity investor.

OPERATIONS	
Fuel	***BP*** will supply fuel in Cherbourg and Philadelphia.
Vessel Operations	**Interocean Ugland Management (IUM)** under MOU to operate the ships.
Information Technology	***Schneider Logistics and CP Ships*** to execute IT development and integration.
Inland Transportation USA & Europe	**Schneider Logistics** will manage inland transportation in North America and Europe and act as lead logistics provider integrating product end to end.
Container and Chassis Management	**CP Ships** will manage the container and chassis fleets.
Terminal Operations	**Holt Cargo Systems** will be the Philadelphia terminal operator.
Program Management	**Lockheed Martin** will manage systems and project integration

MARKETING	
Commercial Management	**CP Ships** will manage sales and marketing, backoffice functions, and customer service.
Freight Forwarders	**AEI, Barthco, BAX Global, Circle, Direct Container Lines, Emery, Geologistics, MSAS, and Panalpina** have all committed to Preliminary "Take or Pay" Agreements

FastShip has taken a comprehensive approach to mitigating risk, building on a $32 million investment to date on technical and business development

- **Market risk**: conservative business plan based **solely** on diversion of existing cargo flows; wholesale approach to market development based on alliances with leading international freight forwarders; preliminary off-take agreements for 25% of capacity today to be extended to 35 percent of capacity; protected market position through patents combined with first mover advantage
- **Technical risk – ships**: exhaustive program of design, testing and classification society scrutiny; world-class suppliers providing expertise, performance warranties and investment in FastShip; insurance to cover any rework necessary to meet performance specifications; substantial operating buffers incorporated in ship schedule
- **Construction cost overrun**: supply contracts are fixed price; MARAD funding includes two layers of cost overrun protection amounting to over $200 million
- **Construction delay**: supply contracts have firm delivery dates with penalties for late delivery; suppliers have demonstrated track record of on-time delivery; insurance will cover debt service and G&A if project is delayed for a variety of reasons
- **Operating risk**: world class partners will operate the ships, terminals and inland networks; a nine month period between delivery of first and second ships permits extensive shakedown of ships, terminals, inland networks and IT; operating buffers ensure on-time performance
- **Fuel**: FastShip has less fuel exposure than competing aircraft; contracts will permit pass through of fuel price increases; high fuel prices have been assumed throughout business projections. Risk management will be done by BP.
- **Execution risk**: strategic partnering approach brings existing world-class capabilities to bear in the key areas of technology, operations, sales and marketing, and finance

Agenda – February 6, 2002

- **FastShip Business Overview**
- **Video – FastShip with National Defense Features**
- **FastShip Military Sealift Capabilities with NDF**

Agenda – February 6, 2002

- **FastShip Business Overview**
- **Video – FastShip with National Defense Features**
- **FastShip Military Sealift Capabilities with NDF**

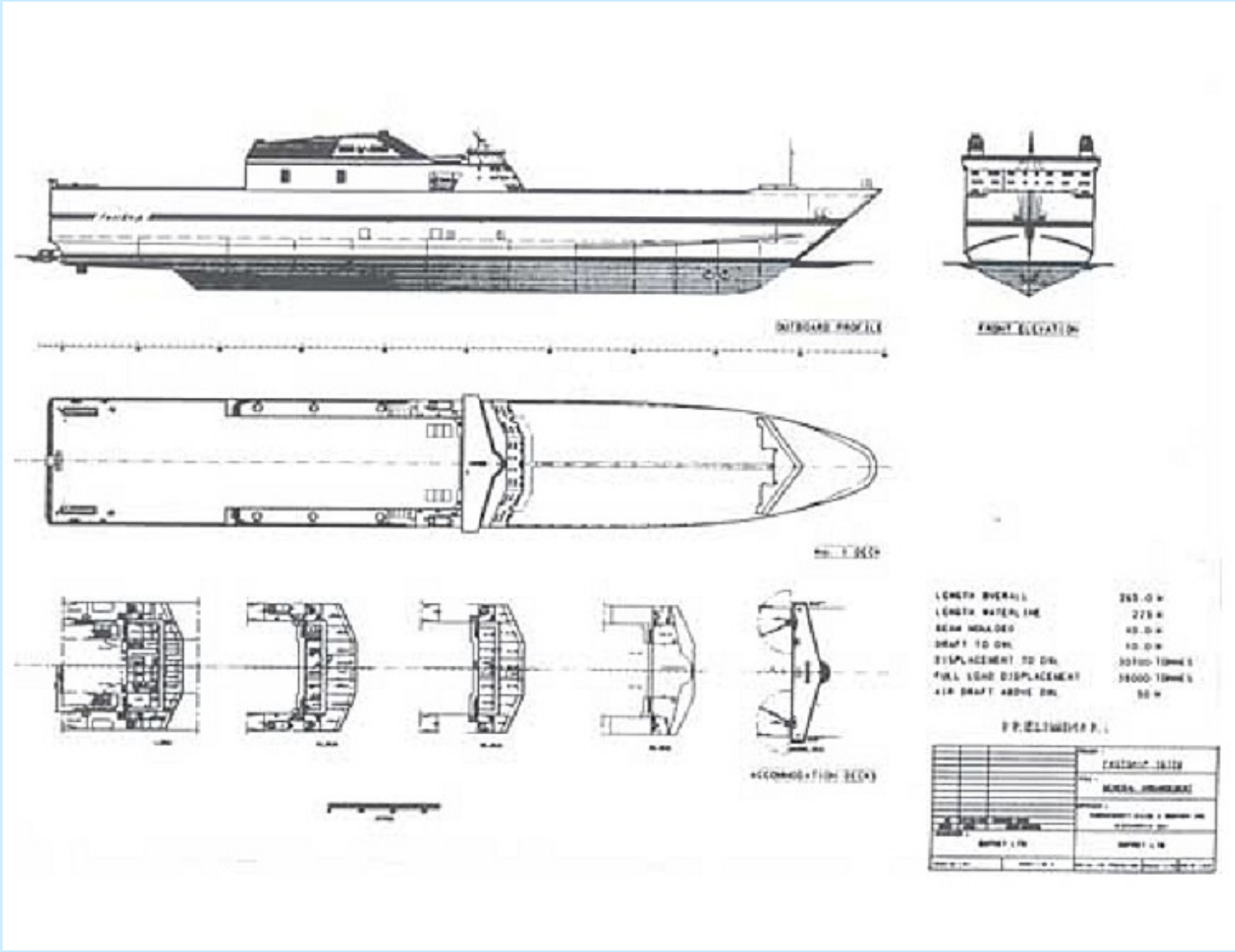
FastShip will provide increased sealift and rapid deployment capability for military contingencies or humanitarian emergencies

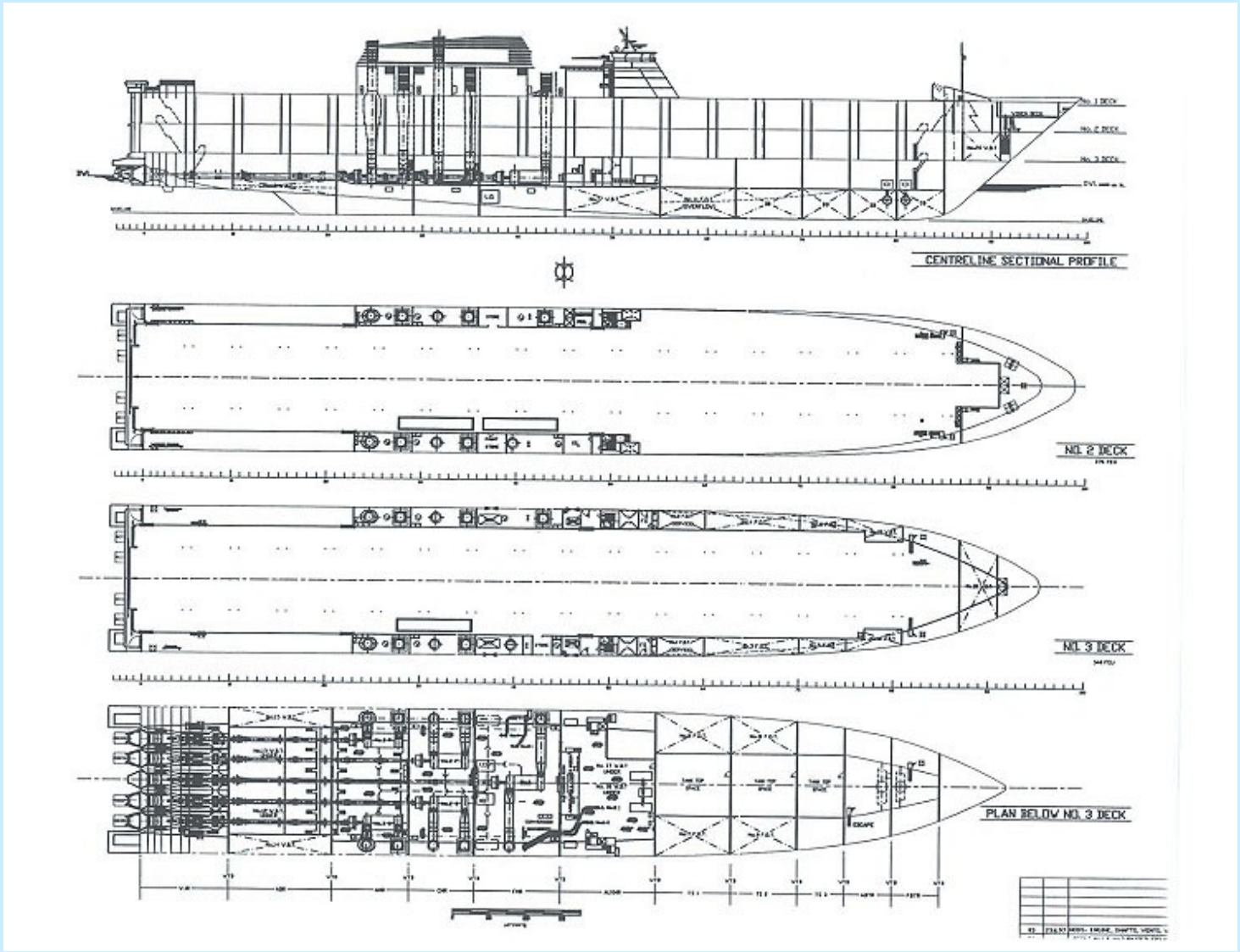
- Leverage of commercial assets for U.S. power projection with addition of national defense features
- Enhanced sealift capability and rapid deployment:
  - 300 helicopters to the Persian Gulf in less than 11 days.
  - 10,000 tons of military cargo (e.g., a current armored battalion with heavy tanks) over about 5,000 nautical miles at a speed of 36 knots without refueling.
  - One FastShip vessel = airlift capacity of 40 C-17 military aircraft
- Operation in austere (underdeveloped) ports
- Reduced dependence on prepositioning of unit equipment
- Elimination of bottlenecks through rapid logistics implementing DOD agile port concept
- Speedy response to global humanitarian needs in time of emergency

Quadrennial Defense Review Report, September 30, 2001

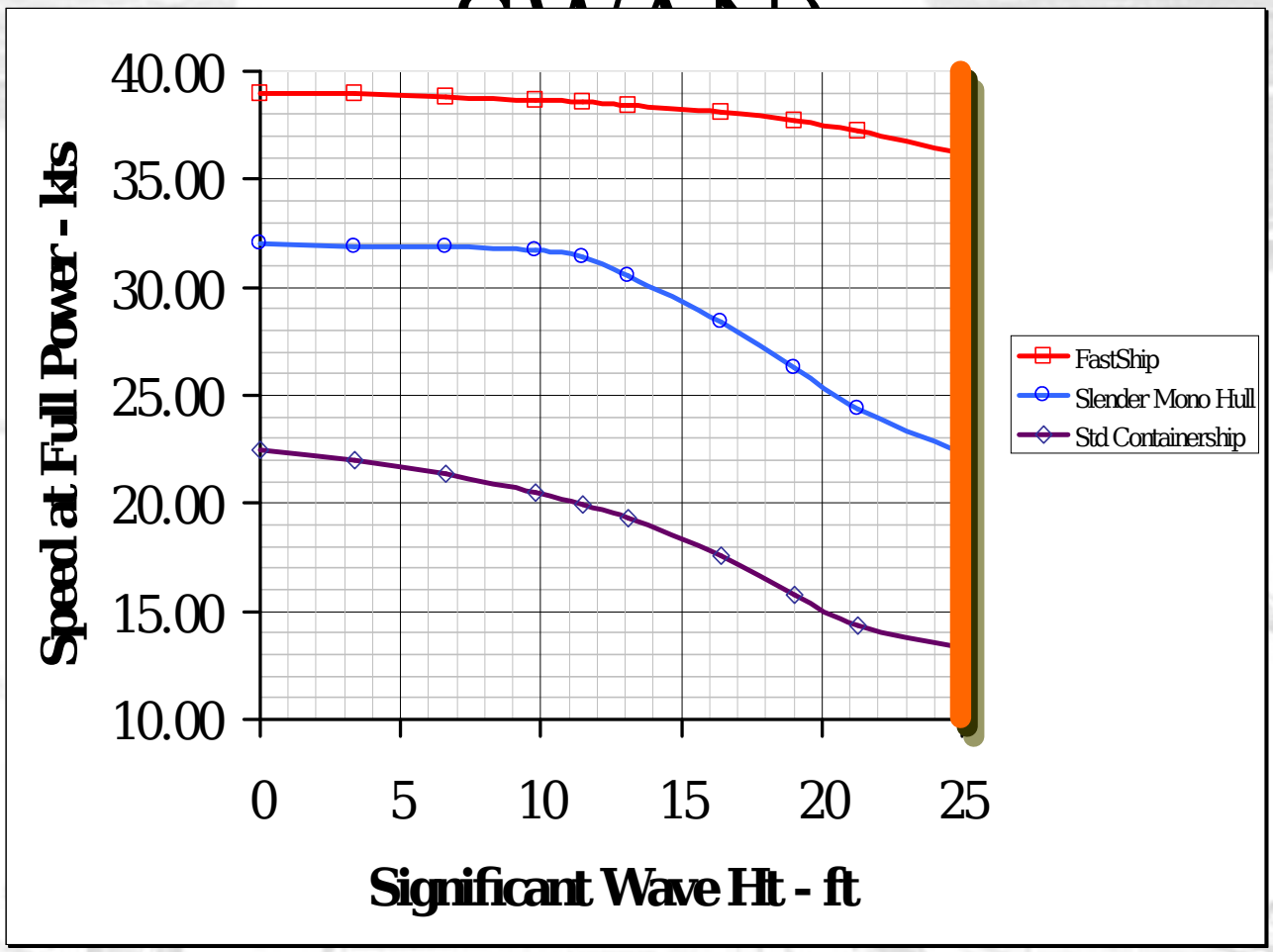
"…the U.S. global military posture will be reoriented to …provide sufficient mobility, including airlift, sealift, pre-positioning, basing infrastructure, alternative points of debarkation, and new logistical concepts of operations, to conduct expeditionary operations in distant theaters…"

"The Secretary of the Navy will develop new concepts of maritime pre-positioning, high-speed sealift, and new amphibious capabilities for the Marine Corps."


OUTBOARD PROFILE
FRONT ELEVATION
LENGTH OVERALL 265.0 m
LENGTH WATERLINE 228 m
BEAM MOULDED 40.0 m
DRAFT TO DWL 10.0 m
DISPLACEMENT TO DWL 30700 TONNES
FULL LOAD DISPLACEMENT 38000 TONNES
AIR DRAFT ABOVE DWL 50 m


CENTRELINE SECTIONAL PROFILE
NO. 2 DECK
NO. 3 DECK
PLAN BELOW NO. 3 DECK

Speed Reduction in Head Seas (M.I.T. Evaluation using SWAN)



Business Confidential

FastShip: Technical Validation

- ✓ **MIT:** SWAN Codes Seakeeping Analysis
- ✓ **SSPA:** Resistance & Propulsion, Seakeeping Tank Tests
- ✓ **DTU:** QST, Computer Analysis
- ✓ **Trondheim:** Extreme Sea Condition Analysis
- ✓ **DNV:** Classification to +100A1 CSA-2A for Global Operation
- ✓ **U.S. NavSea:** Evaluation of National Defense Features (NDF)
- ✓ **JJMA:** Due Diligence for Investors
- ✓ **Rosenblatt:** Due Diligence for Investors

Business Confidential

FastShip: National Defense Features

(NDF)

- = ‘Bolt-on’ equipment to be added at time of conversion to Sealift

o = Features incorporated into the commercial ship

- Provision for additional ventilation capacity
- Provision for extra firefighting capacity
- Provision for elevator capability and extension on stern ramp
- Provision for U.S.N. underway replenishment capability (UNREP)
- Provision for mounting strengthened deck panels on CPT deck-locks

FastShip: Operational Enhancements

With NDF

- 158,000 Sq. Ft. enclosed deck area with 22 Ft. clear height throughout
- Up to 3.5 Million Cu. Ft. enclosed volume
- Up to Ten Million Available Ton-Miles per day, per FastShip
- Use of austere Ro-Ro ports without cranes
- Compatible with current in-stream unloading equipme (J-LOTS)
- Extended range without refueling; unlimited range wit UNREP

2rd Deck – Armored Battalion Load-ou

Business Confidential

3rd Deck – Armored Battalion Load-out

FastShip
Armored Battalion Load

Item	Qty	Deck Area (Sq Ft)	L, W, H (inches)	Unit Wgt (LT)	WGT (LT)
Tank (M1)	58	20,648	356, 144, 104	56.3	3,265.4
HET TRK	3	886	370, 115, 142	17.1	51.2
HET TRK	3	1470	515, 137, 114	14.1	42.3
RVY VEH	3	969	323, 144, 134	48.0	143.9
TRK 5T	5	1037	311, 96, 119	14.3	71.4
TRK 2-1/2T	25	177	265, 81, 101	8.0	200.9
TRK 1-1/4T (HMMWV)	25	111	191, 84, 74	2.9	73.7
TRK 1/4T	15	880	132, 64, 71	1.1	16.1
AH-64	7	3,195	603, 109, 142	6.1	42.5
UH-60A	5	2,962	496, 172, 148	6.0	23.0
OH-58	8	213	393, 78, 115	0.9	7.2
CH-47D	4	2,550	612, 150, 224	13.4	53.6
PERS CARR	18	4,031	258, 125, 116	17.9	321.5
SP 155M	6	1,893	355, 128, 114	21.9	131.3
ACE	2	431	246, 126, 105	15.8	31.6
	Subtotal:	41,453		Subtotal:	4,475.6
	25% Stow Factor:	13,680		Tie Downs (12.5%)	245.7
	Total Deck Area:	55,133		Grand Total	4,720.8 LT

Available Deck Area		Deck Margin Remaining After Loading	Deck Area Load-out:
(No. 2 Deck)	78,600	29%	12,558 L. Tons
(No. 3 Deck)	68,400	20%	(2.7 Armored Battalions)
Total	147,000		

Total Armored Battalions Carried (using 75% of total available deck area): 2

Business Confidential

FastShip
Air Cavalry Squadron Load-Out

Item	QTY	L, W (Ins.)	Unit WT (LT)	Total Weight (LT)
UH	18	608, 129	6.9	123.8
OH-58C	19	386, 75	1.3	24.6
EH-60	3	608, 129	6.9	20.7
AH-1F	12	549, 84	7.8	93.2
AH-64	16	609, 123	5.4	86.0
	Total: 68			Subtotal: 348.3
				Tie down (+12%): 41.8
				Total: 390.1

Total Available Deck Area (Sq. Ft.):

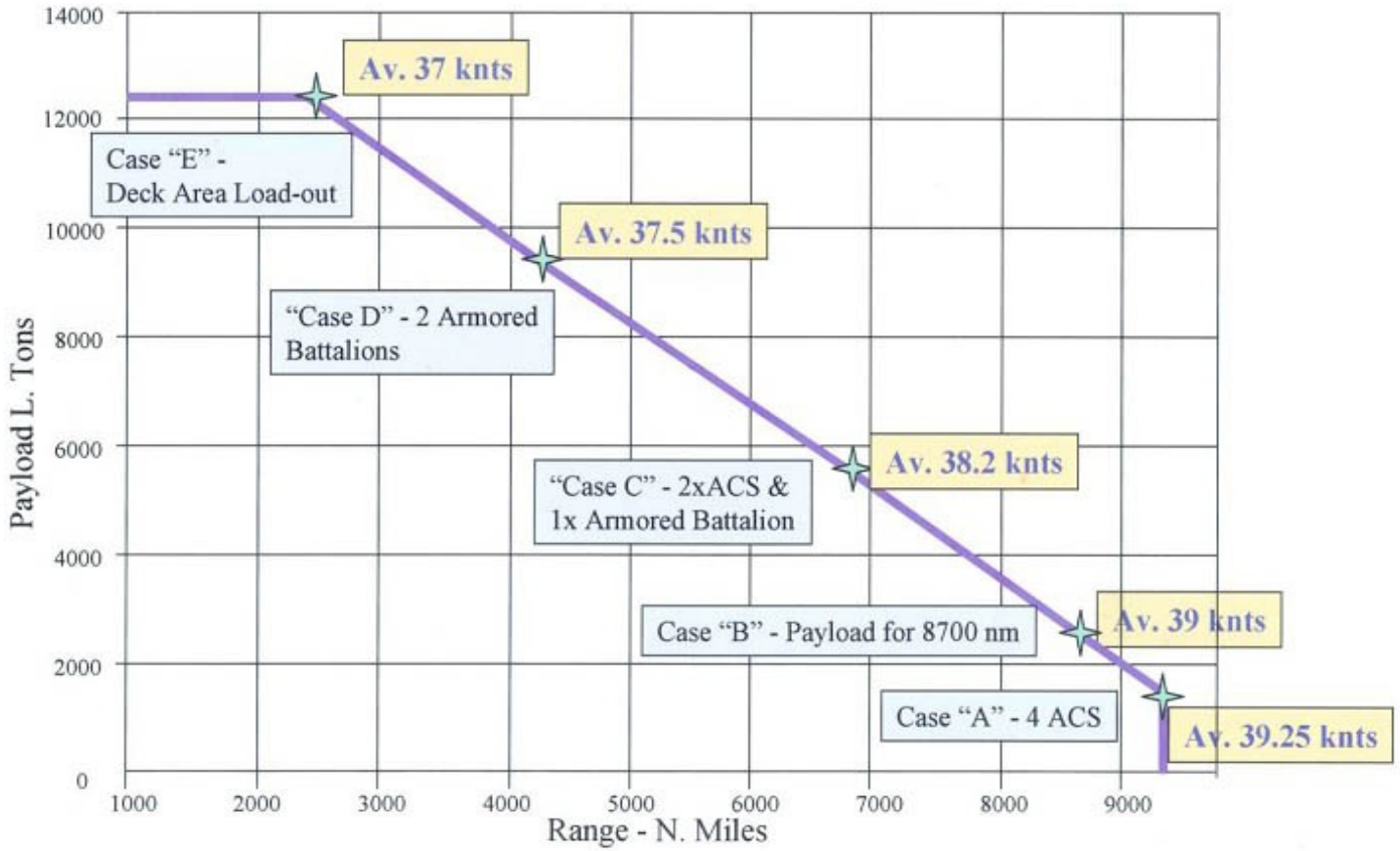
No. 2 Deck	78,600
No. 3 Deck	68,400
Total	147,000

Required Area for 1 X A.C.S.	27,382 Sq. Ft.
25% Stow Factor	9,036 Sq. Ft.
Total Required Area per A.C.S.	36,418 Sq. Ft.

Total A.C.S. Carried (Using Total Available Deck Area): 4

Business Confidential

FastShip Speed/Payload/Range (with NDF)



Business Confidential

Summary

- FastShip will be a U.S. company and will be U.S. flagged and U.S. crewed
- Strong Congressional support exists for FastShip, both commercially and militarily
- FastShip is committed to build ships in the U.S.
- Marad Title XI guarantees are a prerequisite for a U.S. build/U.S. flag
- Transcom's active support of FastShip to Marad would be important as Marad allocates scarce Title XI resources.
- After six years of working with Marad, FastShip is ready to complete the financing and begin executing the build program